

**STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION**

DOCKET 04-IEP-1G	
DATE	
RECD.	JUL 15 2005

In the Matter of:)	Docket No. 04-IEP-1G
The Preparation of the 2005 Integrated)	2005 Energy Report:
Energy Policy Report (Energy Report))	Comments on Electricity
)	Environmental Performance
)	Report

**COMMENTS OF PPM ENERGY ON ASSESSMENT OF AVIAN MORTALITY
FROM COLLISIONS AND ELECTROCUTIONS**

With this letter, PPM Energy would like to correct some of the conclusions about the Solano County Wind Resource Area that were contained in the California Energy Commissions' June 2005 "Assessment of Avian Mortality from Collisions and Electrocutions." PPM Energy purchases all of the output of the High Winds Wind Project and recently acquired the Shiloh 1 Wind Project, and we closely track the avian and bat monitoring at both projects.

The CEC report (page 4) states that "recent post-construction carcass surveys for the High Winds Project indicate a high rate of bird mortality." That and similar statements elsewhere in the report suggest that the Solano Wind County Wind Resource Area may be an area of high risk to birds and bats. However, that conclusion is not substantiated by the estimates of avian mortality quoted in the same CEC report. Mortality estimates on page 22 of the report indicate that High Winds avian mortality rate is 0.924 birds/MW/year (uncorrected for searcher efficiency and scavenging). According to our own calculations, this estimate seems high, but in this comparison, I will use them for purposes of argument. Figure 3 of the same report shows that unadjusted "all bird mortality" is lower at Solano than at Tehachapi or Altamont, even though searches were

conducted more frequently at Solano than the other two areas. The “all bird mortality rate” at Solano of just under 1 bird/MW/year compares favorably with data from other regions of the state and the rest of the country, as shown below in Table 1. The Solano estimates have not been corrected for scavenging or searcher efficiency (scavenging and searcher efficiency trial are planned to be completed in the next monitoring year).

Table 1
Estimates of Total Avian and Raptor Mortality at New Generation Facilities

Project	Birds/MW/Year	Raptors/MW/Year
High Winds*	0.92	0.43
Altamont*	1.5-2.2 (2.2 to 8.1)	0.9-1.2
Regional Data from NWCC**		
Northwest	2.7 (0.9 to 2.9)	0.07 (0.0 to 0.09)
Rocky Mountains	2.3 (2.0 to 2.5)	0.05 (0.05 to 0.06)
Upper Midwest	4.2 (2.0 to 5.9)	0.01 (0.01 to 0.04)
East	3 (2.7 to 11.7)	0.01 (0.00 to 0.02)

* Source: CEC June 2005 report (for uncorrected bird and raptor mortality estimates). The initial numbers in each cell are estimates not corrected for searcher efficiency and carcass scavenging; estimates in parentheses are based on searcher efficiency and scavenging extrapolations made at Altamont Pass from studies in Oregon and Washington

** These mean estimates have been corrected for searcher efficiency and carcass scavenging. Source: NWCC “Wind Turbine Interactions with Birds and Bats: A summary of Research Results and Remaining Questions” November 2004. Values in parentheses are ranges of the individual study estimates

For some reason, the CEC report, rather than focusing on overall avian mortality, appears to be more concerned with raptor mortality at the Solano Wind Resource Area. It is true that of the avian mortality at the High Winds project, a higher proportion is raptors than at other projects. However, most of the raptors that have been killed at High Winds have been American Kestrels and red-tailed hawks—two of the most common raptors in the country, which are not protected by the ESA (although they are, like most birds, protected by the MBTA). The High Winds

monitoring report suggests that the high proportion of raptors in the observed avian mortality may relate to a cyclical upswing in the local population of mice and voles. Results from the next two years of monitoring will help determine whether that is in fact the case.

The High Winds avian mortality monitoring will be continuing for 2 more years, and the monitoring at the adjacent Shiloh 1 Wind Project will continue for 3 years after construction, allowing a full evaluation of the level and nature of bird and bat mortality in this wind resource area. However, the data available to date and quoted in the CEC report do not support the CEC's conclusion that the Solano Wind Resource Area has high avian mortality; in fact, they demonstrate the opposite.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Andy Linehan", with a long horizontal flourish extending to the right.

Andy Linehan
Director, Wind Permitting
PPM Energy